Table S10. Studies assessing association between *E. multilocularis* infection in foxes and host population factors

| Reference                        | Study Information   | Statistical Method                                     | Significant Factor   |
|----------------------------------|---|--|--|
| Saitoh et al., 1998<br>[103]     | Post mortem<br>examination of 9,828<br>red foxes in Hokkaido<br>(Japan)             | Multivariable logistic regression                      | Vole abundance affected infection rates in foxes ( <i>p</i> <0.001)  |
| Hofer et al., 2000 [76]          | Post mortem<br>examination of 388 red<br>foxes in in Zurich<br>(Switzerland)        | Univariable analysis                                   | Higher prevalence in foxes from rural areas (p<0.01) vs. urban areas during winter   |
| Stieger et al., 2002<br>[102]    | Coproantigen<br>examination of 604<br>fox faecal samples in<br>Zurich (Switzerland) | Univariable analysis                                   | Higher positive results in border and periurban zone compare to urban zone during winter ( <i>p</i> <0.01)   |
| Raoul et al., 2003<br>[105]      | Coproantigen<br>examination of 156<br>fox faecal samples in<br>Le Souillot (France) | Univariable analysis                                   | Decrease of infection as fox numbers reduce ( <i>p</i> =0.0004)  |
| Fischer et al., 2005 [78]        | Post mortem<br>examination of 267<br>foxes in Geneva<br>(Switzerland)               | Multivariable logistic regression                      | Level of urbanization.<br>Rural vs urban (OR 2.73, 95%CI 1.24-5.97, <i>p</i> =0.012) and border vs urban (OR 2.32, 95%CI 1.03-5.18, <i>p</i> =0.04)  |
| Tanner et al., 2006<br>[104]     | Post mortem<br>examination of 543<br>foxes in Grisons<br>(Switzerland)              | Linear correlation<br>(Spearman's rank<br>coefficient) | Prevalence correlated with predation on intermediate hosts ( <i>Microtus/Pitymys</i> ) ( <i>p</i> =0.018)  |
| Miterpáková et al.,<br>2006 [89] | Parasitological<br>examination of 3,096<br>foxes in Slovakia                        | Simple correlation                                     | Prevalence correlated with density of small mammals ( <i>p</i> =0.022)   |
| Reperant et al., 2007 [100]      | Post mortem<br>examination of 228 red<br>foxes in Geneva<br>(Switzerland)           | Multivariable logistic regression                      | Decrease prevalence from rural to urban areas ( <i>p</i> =0.037)   |
| Hegglin et al., 2007 [82]        | Post mortem examination of 582 foxes in Zurich (Switzerland)                        | Multivariable logistic regression                      | Type of urbanization zone (AICc weight=1) (i.e. Border vs. periurban, OR 0.46 95%CI 0.25-0.85) and zone age (marked for adults) (AICc weight=0.45) 1 |
| Hanosset et al., 2008            | Post mortem   | Linear correlation                                     | Positive correlation   |

| [93]                           | examination of 990<br>foxes in Wallonia<br>(Belgium)                | (Spearman's rank coefficient)     | between prevalence in foxes and muskrats (Spearman's rank correlation coefficient=1, $p < 0.0001$ )  |
|--------------------------------|---|-----------------------------------|--|
| Robardet et al., 2008<br>[101] | Post mortem<br>examination of 127 red<br>foxes in Nancy<br>(France) | Multivariable logistic regression | Type of urbanization zone (AICc weight=0.94). Urban vs. rural (OR 0.04, 95%CI 0.01-0.14) and peri- urban vs. rural (OR 0.38, 95%CI 0.14-1.01). |

Measures of association reported when available

criterion corrected for small samples sizes.

<sup>(\*)</sup> Interaction term.

The model explaining best the prevalence rate in foxes (lowest AICc) included the variables *Zone*, *season*, *age*, *zone* × *age*, *season* × *age*.

Abbreviations: OR, odds ratio; CI, confidence interval; AICc, Akaike's information